

UTILITY MODEL APPLICATION PUBLICATION OF JAPAN

(11)Publication number : 59-24767
 (43)Date of publication of application : 16.02.1984

(51)Int.Cl. C 25 D 7/06
 C 25 D 17/10
 21/10

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(54) PLATING DEVICE OF METAL BAND**Detailed Descriptions of the Invention:**

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(page 3, line 1 to page 4, line 16)

The present device will now be described based on the drawings.

In Fig. 1, reference numeral 1 denotes a plating bath. Reference numeral 2 denotes a metal strip as a member to be plated, which is run in the plating bath with its cross section oriented vertically. Reference numerals 3 and 3 denote anodes as copper base members. Reference numerals 41 and 41 denote shielding plates for regulating plating current provided at both sides of an upper end of the metal strip, and prevent electric field concentration at the upper end of the metal strap by electric field regulation to uniformize plating current density. Reference numerals 42 and 42 are shielding plates for regulating plating current provided at both sides of a lower end of the metal strip, and are inclined so as to be away from the metal strap 1 toward the lower ends. Reference numerals 5 and 5 denote plating solution ejecting pipes, and are provided below the above described lower shielding plates 42 and 42.

In the above description, in place of the plating solution ejecting pipes, an air ejecting pipe 50 can be used as shown in Fig. 2A. When a plating solution level / is much higher than the upper end of the metal strip 2 as shown in Fig. 2B, it is effective to provide a ceiling plate 43 between the upper shielding plates 41 and 41 to prevent entry of the current into the upper end of the metal strip from above. Further, as shown in Fig. 2B, the plating solution agitating ejecting pipes 5 and the shielding plates 42 can be integrated.

The plating device for a metal strip according to the present device has the constitution in which the inclined shielding plates which are away from the metal strip toward the lower ends are respectively provided at both sides of the lower end of the metal strip which is vertically oriented in cross section that is the material to be plated, and the plating solution agitating ejecting pipes are provided below the shielding plates as described above. Therefore, the outflow from the ejecting

pipes is preferably flown toward the metal strip owing to the inclined shielding plates, and the agitating effect of the plating solution on the metal plate surface can be sufficiently ensured. Naturally, uniformization of the plating current density at the lower end of the metal strip can be achieved by the lower shielding plates.

Consequently, according to this device, the metal strip can be plated at the uniform plating current density under sufficient plating solution agitation, and copper plated aluminum strip and the like of excellent quality can be obtained.

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